

# Hazardous Waste Generator Requirements



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**Colorado Department  
of Public Health  
and Environment**

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## Your classification is based on:

- Generation per calendar month
- Accumulation onsite at any one time
- In kilograms



## Liquid waste in gallons

- Weigh your waste
- Convert using specific gravity (sg)
  - Ratio of the density of a waste to the density of water
  - Water weighs 8.34 pounds per gallon
  - $SG \times 8.34 \text{ lbs/gallon} = X \text{ lbs/gal}$

## Why it's important

Specific Gravity of Tetrachloroethylene = 1.62

$$1.62 \times 8.34 = 13.51 \text{ lbs per gallon}$$



Specific Gravity of Toluene = 0.867

$$0.867 \times 8.34 = 7.23 \text{ lbs per gallon}$$



Over 1 kilogram (2.2 lbs) of acutely hazardous P-listed waste makes a facility a Large Quantity Handler and subject to the most stringent requirements!

# Three Generator Categories

- Conditionally Exempt Small Quantity Generator (CESQG)
- Small Quantity Generator (SQG)
- Large Quantity Generator (LQG)

# Hazardous Waste Generator Categories

- Hospitals <100 beds and with no pathology or limited pathology, are often conditionally exempt small quantity generators (CESQG).
- Hospitals >100 beds and/or with extensive pathology laboratories are often small quantity Generators (SQG).

## Episodic Generators

If you generate at higher rate for a month

- Letter to CDPHE
- Comply with standards of the generation status for that month
- Consider implementing higher standards year round

## Episodic Generators - Fees

- If you operate at higher rate for 4 or more calendar months per year, you are assessed fee for higher generator status.



# Self-Certification Environmental Results Program

- Requires certain generators to complete and submit online compliance checklist
- Yes/no questions, with guidance
- Special form specific to Health Care

2009 HAZARDOUS WASTE COMPLIANCE SELF-CERTIFICATION CHECKLIST

5. If you answered "NO" to any of the questions listed in Section C, please indicate the item (for example C.2.) and explain how and by what date you plan to return to compliance.

**D. Hazardous Waste Container Management**  
For more information, go to the [Guidance Document Link to Section D](#)

|   | YES                   | NO                    | N/A                   |
|---|-----------------------|-----------------------|-----------------------|
| 1. Are all containers used to store hazardous waste labeled with the words "Hazardous Waste"?   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. Are all hazardous waste containers, except satellite accumulation containers, marked with the date when the first drop of hazardous waste is added to the container?   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. Are all containers used to store hazardous waste in good condition (not rusted, dented, bulging or leaking)?   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. Are all containers used to store hazardous waste kept closed except when adding or removing waste?   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. Do you inspect weekly, and correct any issues noted, all containers that are used to store hazardous waste and look for: containers in poor condition, leaking containers, compatibility of wastes, hazardous waste labels, accumulation start dates, and ensure that the containers are closed? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. Are incompatible wastes segregated from each other? For example, are acids and bases stored separately?  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. Are containers shipped to an appropriate treatment, storage, and disposal facility (TSD) within 180 days (or 270 days if the TSD is more than 200 miles away)?   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8. If you answered "NO" to any of the questions listed in Section D, please indicate the item (for example D.1.) and explain how and by what date you plan to return to compliance.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**E. Off-Site Shipment of Hazardous Waste**  
For more information, go to the [Guidance Document Link to Section E](#)

|  | YES                   | NO                    | N/A                   |
|--|-----------------------|-----------------------|-----------------------|
| 1. Are off-site shipments of hazardous wastes that are not covered by a reclamation agreement accompanied by a hazardous waste manifest? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. Are all hazardous waste manifests completed accurately?   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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# Self-Certification

- Track sector's compliance with hazardous waste regulations
- More precise follow-up compliance assistance, targeted enforcement
- Self-Cert checklist = guide to hazardous regulations, periodic training refresher

**2011 DRY CLEANERS SELF-CERTIFICATION**  
From the Colorado Department of Public Health and Environment  
한인세탁소를 위한 워크숍은 세탁협회로 연락바랍니다(303-799-0100)

**WHO:** Dry Cleaners who use PERC

**WHAT:** Certify that you are in compliance with Colorado Air and Hazardous Waste Regulations and that you are using Best Management Practices.

**HOW:** Complete self-certification checklist on-line at: <http://www.cdphe.state.co.us/hm/certify> OR fill out the booklet in the back of your dry cleaner compliance calendar. Tear it out and mail it to CDPHE (address is on the front of this post card).

**WHEN:** No later than **February 28, 2011**

**WHY:** In accordance with 6 CCR 1007-3, section 261.5 and 262.43. A penalty of \$1,000 or more may be assessed to anyone who fails to submit the self-certification checklist on or before February 28, 2011. Additionally, a percentage of all dry cleaners will be randomly inspected.

Your self-certification checklist asks for your EPA ID Number. This number can be found on the front of this postcard.

If, during your self-assessment, you discover that you are out of compliance with any of the regulations, correct the violations immediately. If you do not understand the regulation pertaining to a specific question, please contact any of the assistance providers listed below or listed in the compliance booklet. Calling us for assistance will not increase the chances that your facility will be inspected later.

Questions?  
Amy Williams 303-692-3461  
Derek Boer 303-692-3329  
Joni Canterbury 303-692-3175

# Conditionally Exempt Small Quantity Generators - CESQGs

- Generates  $\leq 100$  kgs per month (220 lbs)
- Accumulates  $\leq 1,000$  kgs (2,200 lbs)



- **Acutely hazardous waste:**
  - Less than 1 kilogram generated per month, or accumulated on-site

# CESQG Requirements

- Hazardous waste determination on all wastes
- Properly dispose of hazardous waste at a permitted facility
  - No on-site disposal of hazardous waste
  - No disposal of hazardous waste in solid waste landfill
- Maintain and operate facility in a manner to minimize the possibility of a release

# CESQG Requirements

- Notify CDPHE and obtain EPA ID Number if generating 3 gallons or more per year of F001, F002, F004 or F005 waste
  - 10% or more PCE, methylene chloride, toluene, MEK, others
  - May be applicable for histology labs
- If you receive a Self-Certification Checklist, complete and submit it within the specified time



## Exceeding 100 kilogram generation limit

- You are a SQG and must comply with SQG requirements.

## Exceeding 1,000 kilogram accumulation limit

- You are a non-permitted storage facility and subject SQG requirements.

## Exceeding 1 kilogram P-listed limit

- You are a LQG and must comply with LQG requirements.

## Small Quantity Generators – SQGs

- Generates 100 – 1,000 kgs per month (220 – 2,200 lbs)



- Accumulates  $\leq 6,000$  kgs (13,200 lbs)



- **Acutely hazardous waste:**
  - Less than 1 kilogram generated per month or accumulated on-site

## Small Quantity Generators – SQGs

- Generates between 100 and 1,000 kilograms per month
- No more than 6,000 kilograms on-site at one time
- Acutely hazardous waste:
  - Less than 1 kilogram generated per month or accumulated on-site



## SQG Requirements

- Hazardous wastes determination on all wastes; keep test results/waste determinations for 3 years
- Notify CDPHE and obtain an EPA ID number
- Must not store waste on site for more than 180 days (270 days if shipping to a TSDF 200 miles or more from the facility)
- Ship hazardous waste on manifests



# Complete Manifests

- EPA ID number on line 1
- Hazardous waste codes
- Person that signs for facility must have waste training
- Signature of operator at disposal facility within 45 days for LQG

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. \_\_\_\_\_

2. Generator's Name and Mailing Address \_\_\_\_\_

3. Generator's Phone ( ) \_\_\_\_\_

4. Transporter 1 Company Name \_\_\_\_\_

5. Transporter 1 US EPA ID Number \_\_\_\_\_

6. Transporter 2 Company Name \_\_\_\_\_

7. Transporter 2 US EPA ID Number \_\_\_\_\_

8. Designated Facility Name and Site Address \_\_\_\_\_

9. US EPA ID Number \_\_\_\_\_

10. State of \_\_\_\_\_

11. Description (including Proper Shipping Name, Hazard Class, and ID Number) \_\_\_\_\_

12. Containers \_\_\_\_\_

13. Total Quantity \_\_\_\_\_

14. Unit and Vol \_\_\_\_\_

15. Waste No. \_\_\_\_\_

16. Additional Descriptions for Materials Listed Above \_\_\_\_\_

17. Handling Codes for Wastes Listed Above \_\_\_\_\_

18. Special Handling Instructions and Additional Information \_\_\_\_\_

19. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this manifest are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and potential threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to determine the waste generation and select the waste management method that is available to me and that I can afford.

Printed Name \_\_\_\_\_ Signature \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

20. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name \_\_\_\_\_ Signature \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

21. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name \_\_\_\_\_ Signature \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

22. Discrepancy Indication Space \_\_\_\_\_

23. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name \_\_\_\_\_ Signature \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

EPA Form 8700 - 22 (Rev. 3 - 89) Previous editions are obsolete.

# SQG Requirements

## Satellite Accumulation Areas (SAAs)

- Accumulate 55 gallons of one waste at or near point of generation and under the control of the operator
- “At or near” - nothing can interfere with getting waste to area (stairs, foot traffic, other waste)
- “Under the control” - operator’s visual observation or a locking device



# SQG Requirements

## Satellite Accumulation Areas (SAAs)

- Labeled with words “Hazardous Waste” or other identifying words - “Waste Solvent”
- Good condition and not leaking
- Closed (except when waste added or removed)
- Moved immediately to storage area when full
- Inspected weekly – labeling, leaks, deterioration, compatibility; problems corrected in timely manner



Weekly SAA Container Inspection Log Sheet 5-020

Month: Sept Year: 2006

| Week  | 1         | 2         | 3         | 4         | 5 |
|---|-----------|-----------|-----------|-----------|---|
| <55 Gallons in Satellite Accumulation Area  | ✓         |           | ✓         |           |   |
| Contents of Container Labeled   | ✓         | ✓         | ✓         | ✓         |   |
| Good Condition/Not Leaking  | ✓         | ✓         | ✓         | ✓         |   |
| Kept Closed   | ✓         | ✓         | ✓         | ✓         |   |
| Stored to Prevent Rupture/Leakage   | ✓         | ✓         | ✓         | ✓         |   |
| Waste Compatible With Container   | ✓         | ✓         | ✓         | ✓         |   |
| Incompatible Wastes Separated   | ✓         | ✓         | ✓         | ✓         |   |
| Unstable/Reactive Wastes Stored >50' From Property Line                                     | ✓         | ✓         | ✓         | ✓         |   |
| Adequate Aisle Space  | ✓         | ✓         | ✓         | ✓         |   |
| Accumulation Start Date Marked and Container Moved to 90-day Area When Full or Closed Daily | ✓         | ✓         | ✓         | ✓         |   |
| Your Initials   | <u>Jk</u> | <u>Jk</u> | <u>Jk</u> | <u>Jk</u> |   |

# In-Process waste

## Does not need to be managed as SAA

- Continuously generated, integral part of system
- Moved to SAA or accumulation area at end of shift
- Integral to the process
- May include hard-piped container other physical connection



# SQG Requirements

## 180-Day Accumulation Area

- Labeled with the words “Hazardous Waste”
- Good condition and not leaking
- Closed
- Accumulation start date clearly marked on container



# SQG Requirements

## 180-Day Accumulation Area

- Weekly inspections – labeling, leaks, deterioration, compatibility. Problems corrected in timely manner (suggest logs)
- Incompatibles must not be placed in same container or stored near each other without the separation of a wall, berm, dike
- Provide adequate aisle space





# Weekly Inspections

*“We’re in that area every day.”*

- Problems identified during inspection must be remediated on schedule which ensures no environmental or human health hazard
- Imminent hazard equals immediate action



# SQG Requirements

## Manifests

- Ship hazardous wastes to authorized facility
- Receive with signature of operator at disposal facility within 60 days or let CDPHE know
- Include Land Disposal Restriction (LDR) determination or notification for each waste stream
- Keep manifests/LDR records 3 years

HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CCR062

2. Page 1 of 2

3. Emergency Response Phone: 800-424-5571

4. Facility Name: FLE

5. Generator's Name and Mailing Address: [Redacted]

6. Generator's Site Address (if different than mailing address): [Redacted]

7. Shipper's Name and Mailing Address: [Redacted]

8. Shipper's Site Address (if different than mailing address): [Redacted]

9. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))

| No. | U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))                  | 10. Containers | 11. Total Quantity | 12. U.S. DOT | 13. Waste Code |
|-----|---|----------------|--------------------|--------------|----------------|
| No. |   | Type           |                    |              |                |
| 1   | UNIDENTIFIED, NO. WASTE CORROSIVE LIQUIDS, ACIDIC, INORGANIC, H.O.S., (SULFURIC ACID, PHOSPHORIC ACID), 8, II, (D002, D007) | 1 SP           | 0055 G             |              | D002, D007     |
| 2   | HAZARDOUS WASTE, liquid, n.o.s., (Chromium), 8, HX3082, III   | 1 SP           | 0055 G             |              | D007           |



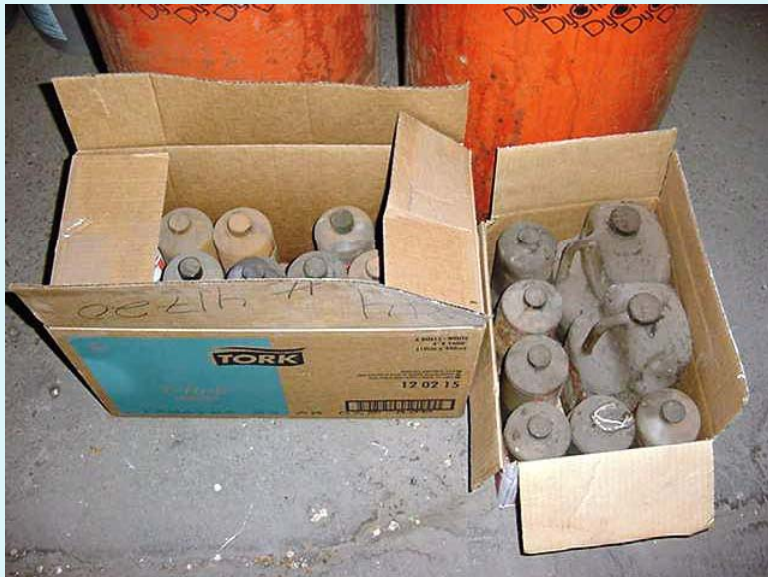
# SQG Requirements

## Training

- Employees must be trained in waste management, emergency response procedures relevant to their responsibilities that ensures compliance with Part 262
  - HW determination, manifests, pre-transport, container management, recordkeeping
- Documentation of training must be retained on-site for all current employees

# SQG Training - Common Violations

- No documentation – newer regulation (February 2008)
- Performance based - training “*that ensures compliance with requirements of Part 262*”



≠



# What kind of training?

- RCRA hazardous waste training
- HazCom, "Right to Know," Hazwoper, and OSHA training are not adequate



# SQG Requirements

## **Emergency Response/Preparedness**

- Emergency Coordinator on-call 24 hours a day
- Post emergency contact information by the telephone
- Internal alarm or emergency communication device
- Aisle space to allow movement of emergency response personnel/equipment





# SQG Phone Postings

- Name/phone number of emergency coordinator
- Fire extinguishers and alarms
- Spill response equipment
- Fire department number



**Emergency Contacts Telephone Posting**

Post this sheet near the telephone(s) in areas where hazardous waste is handled or stored

| Company Emergency Coordinator(s) | Work Phone | Pager # or Home Phone |
|----------------------------------|------------|-----------------------|
| <i>Collision Center</i>          | [REDACTED] | [REDACTED]            |
| [REDACTED]                       | [REDACTED] | [REDACTED]            |

Fire Department Phone *911*

Police Department Phone *911*

Hospital *Lutheran Medical Center* Phone *3-425-2089*

Colorado 24-hour Emergency Response Line Phone *1-877-518-5608*

National Response Center (24-hour) Phone *1-800-424-8802*

**Location of Emergency Response Equipment**

Fire extinguishers *N.E. Corner Prop Area 10 Feet From Storage Building*

Fire alarm (if present) *Office Area*

Spill control material *Exterior Deck 5'*

Special equipment (if present)

(Fulfills emergency contact telephone posting requirements)

# SQG Requirements

## Emergency Response/Preparedness

- Arrangements with local authorities such as police, fire, local health dept, hospital, and emergency response teams.
- Familiarize them with:
  - Layout
  - Properties of hazardous wastes & associated hazards
  - Where personnel are working
  - Roads inside the facility
  - Evacuation routes
- Document refusal



## Exceeding 1,000 kilogram generation limit

- You are a LQG and must comply with:
  - Formal documented annual training
  - Written Contingency Plan
  - Biennial Reporting
  - Higher generator fees



## Exceeding 180 days or 6,000 kilograms

- You are a non-permitted storage facility
- Part 264 standards apply



# Large Quantity Generators – LQGs

- **Acutely hazardous waste!**
  - >1 kg (2.2lbs) generated per month or accumulated on-site makes your facility an LQG!
- **Generates >1,000 kgs (2,200 lbs) per month**
- **No limit on accumulation - less than 90 days**





# Most Common Violations

- Improper Hazardous Waste determinations
- Failure to minimize the potential for release
- Illegal disposal
- Lack of Haz Waste labeling
- Lack of Haz Waste training



- Failure to Label a HW container
- Failure to Implement HW Training



- Failure to make a proper HW determination
- Illegal disposal
- Failure to label a HW container



# Illegal Disposal Down the Drain

- Improper HW determination
- Disposing HW down the drain



# Failure to minimize a release and illegal disposal

- Disposed in the dumpster
  - Nicorette patches (P listed HW)
  - Alcohol (D001 ignitable HW)



# Penalties?

- Failure to make a hazardous waste determination
  - \$2,000 per waste stream
- Failure to label a hazardous waste container
  - \$400 per container
- Failure to provide proper hazardous waste training
  - \$8,000
- Illegal disposal of hazardous waste
  - \$15,000 per day



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